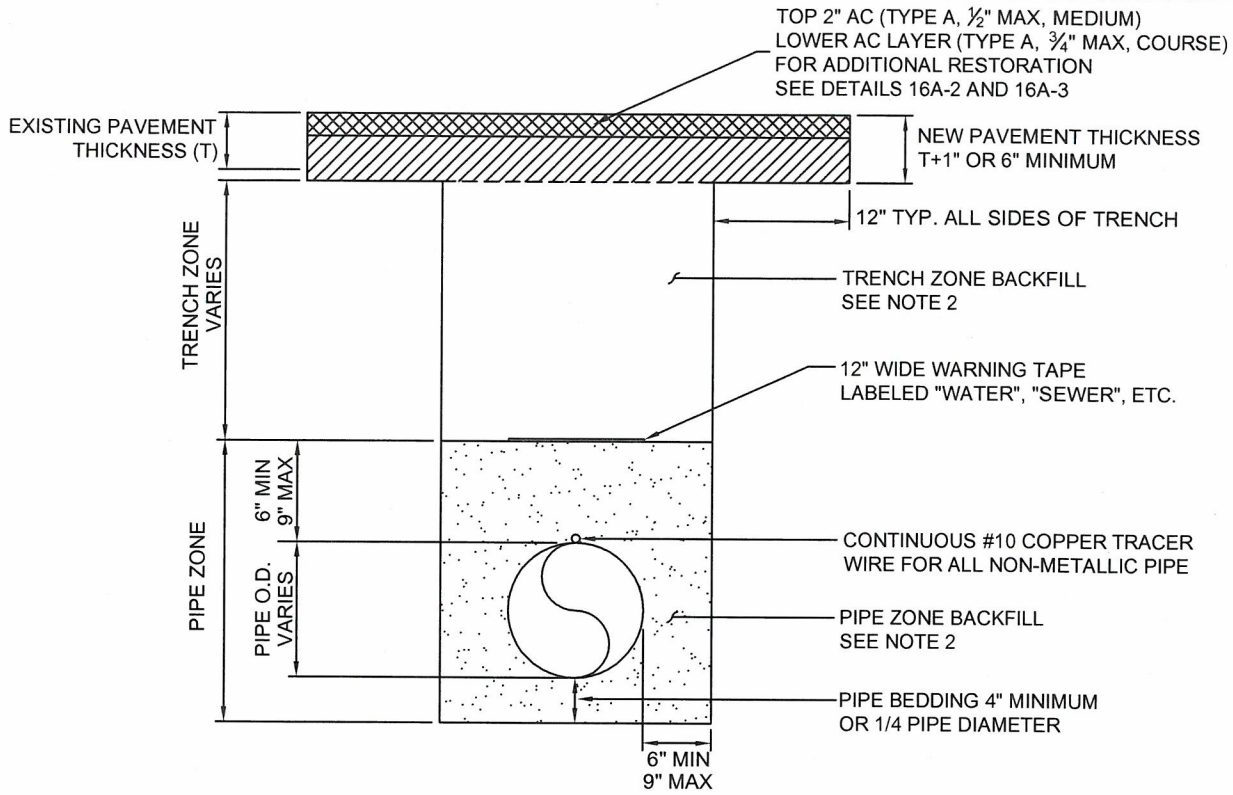


NOTES:

1. WHERE GROUNDWATER IS ENCOUNTERED IN THE PIPE ZONE, PIPE ZONE BACKFILL SHALL BE ENVELOPED WITH MIRAFI 140N GEOTEXTILE OR EQUAL OR AS REQUIRED BY THE ENGINEER. A MINIMUM OF 12" OVERLAP IS REQUIRED.

2. TRENCH BACKFILL AND RELATIVE COMPACTION (RC) SHALL BE AS FOLLOWS:

| BACKFILL ZONE | WATER & RECYCLED WATER PIPES | SEWER & STORM DRAIN PIPES |
|---|---|---|
| TRENCH ZONE (ROADWAY) | AB CLASS 2 (95% RC) | AB CLASS 2 (95% RC) |
| TRENCH ZONE (UNPAVED) | NATIVE MATERIAL (90% RC) | NATIVE MATERIAL (90% RC) |
| PIPE ZONE INCLUDING BEDDING | SAND | ¾" CRUSHED ROCK |

3. CONTRACTOR/PERMITEE SHALL PAY FOR ALL REQUIRED COMPACTION TESTS.

4. SAND SHALL BE FREE FROM ORGANIC MATTER AND CLAY WITH A MINIMUM SAND EQUIVALENT OF 70 AND A SIEVE GRADATION BY WEIGHT AS FOLLOWS:

| SIEVE SIZE | % PASSING |
|---|---|
| NO. 4 | 100 |
| NO. 8 | 75-100 |
| NO. 16 | 55-100 |
| NO. 30 | 30-95 |
| NO. 50 | 10-75 |
| NO. 100 | 2-15 |
| NO. 200 | 0-5 |

5. ¾" CRUSHED ROCK SHALL BE CLEAN AND FREE OF DELETERIOUS SUBSTANCES. ROCK SHALL BE PLACED IN 6" LIFTS AND CONSOLIDATED TIGHTLY.

6. UPON APPROVAL OF THE ENGINEER, CONTROLLED DENSITY FILL (CDF) MAY BE USED IN LIEU OF AB CLASS 2. THE DESIGN FOR CDF SHALL MEET THE FOLLOWING REQUIREMENTS:

| | |
|---|---|
| CEMENT | 50-100 LB/CU.YD |
| FLY ASH, CLASS F | 10-2000 LB/CU.YD |
| FINE AGGREGATE | 2600-3100 LB/CU.YD |
| WATER | 325-580 LB/CU.YD |
| STRENGTH @ 28 DAYS | 50-100 PSI |

7. THE BOTTOM OF EACH PIPE SECTION WILL BE IN CONTINUOUS CONTACT WITH THE BEDDING. BEDDING SHALL BE REMOVED FROM UNDER PIPE BELLS TO PREVENT SAGGING OR UNNECESSARY STRESS ON THE PIPE.

# TYPICAL TRENCH DETAIL

APPROVED BY:

DATE : JULY 8, 2014

DWG. 16A-1